Department of Ecology - Public Comment and Hearing Responsiveness Summary

Fire Mountain Farms: Proposal to Add Elma Unit-Land Application Site

April 22, 2014

On April 22, 2014 a question and answer session, followed by a public meeting and hearing was convened in the Pavilion Room at the Grays Harbor Fairgrounds located at 32 Elma-McCleary Rd, Elma, Washington. The purpose was to answer questions, provide proposal background, and receive testimony on the addition of new acreage to Fire Mountain Farms' coverage under the General Permit for Biosolids Management.

Prior to the meeting and hearing, Ecology provided an informal question and answer session for those in attendance. The question and answer session was not recorded and is not addressed as part of this responsiveness summary.

At the beginning of the meeting, Robert Thode, Owner of Fire Mountain Farms, Inc. provided a brief overview presentation about his proposal and the project. Jamie Olivarez, Regional Biosolids Coordinator with the Department of Ecology (Ecology), then provided a brief summary of the state biosolids program, explaining also how Fire Mountain Farms and their proposal fits into the permit process. Following his presentation, Mr. Olivarez asked whether anyone had questions. There were no questions. After a short break, Ecology Hearing Officer, Sarah Lukas, then called the hearing to order at 6:40 p.m.

Four staff persons attended from Ecology, two from Grays Harbor County Environmental Health, and two from the City of Elma. There were five other people in attendance. No persons in attendance provided public testimony and no written comments were submitted in lieu of public testimony. Ms. Lukas informed those in attendance that written comments may be submitted to Ecology until April 25, 2014 at 6:00 p.m.

Ms. Lukas closed the hearing at 6:44 p.m. after determining that no one was present who wished to testify.

Ecology has attempted to summarize the written comments received during the public comment period and is providing its response accordingly. The agency's formal response follows.

Name:	***Carol and Darryl Druzianich - area residents.***
Question/Comment:	***Carol and Darryl Druzianich are concerned with the underlying aquifer at the site from which they also draw their drinking water. Their property is approximately one-half mile south of the proposed site.***

Response: The application of biosolids to the proposed site will be done so agronomically. This means that the amount of biosolids land applied should not exceed the nitrogen requirement for the growing crop. Applying agronomically helps decrease the potential that nitrogen will pass below the crop root-zone by applying an amount that the crop can readily take up. Applying in this manner is consistent with the protection of surface and groundwater.

Biosolids will only be land applied during the driest periods of the year. The application will occur between July 1st and August 31st unless Ecology allows an extension because of forecasted dry weather. Applying during these dry months reduces the potential for surface runoff as does maintaining a vegetative buffer around the perimeter of the application areas. The depth to groundwater during this time of year is generally at its greatest when compared to other times of the year. Land application is only allowed when the

groundwater under the application area is three feet below ground surface or greater. This requirement, when combined with the principles of agronomic application and the time of year, provides sufficient protection to the underlying aquifer from potential nitrogen contamination.

Question/Comment:	***Carol and Darryl Druzianich are concerned about odors from the project and impact to their property and real estate values.***

Response: Biosolids application is not often odor free, but the operational ideal is that odors are short-lived, and buffers, natural features, and weather conditions all combine to minimize off site impacts. The method of application proposed by Fire Mountain Farms is to surface apply the biosolids.

The biosolids from the Elma wastewater treatment plant (WWTP) have been treated to reduce the volatile (odor causing) compounds and have met a vector attraction reduction criterion established in federal and state law that allow these biosolids to be surface applied. Most of the biosolids to be land applied have endured a long residence time (have been treated for a long period of time) and have become quite stabilized (much of the volatiles have been reduced). The stabilization of biosolids generally reduces its potential to produce serious odors and therefore, attract pests (vectors) that might potentially transfer biosolids from one location to another. In addition, perimeter buffers will aid in reducing potential offsite odor impact.

As stated above, the act of land applying biosolids on this site will only be allowed to occur during the driest months between July 1st and August 31st. The land application of Elma WWTP biosolids will also only likely occur once every five or more years during this established time. In addition, application will not be allowed to occur on federal holidays or weekends.

By establishing a vector attraction reduction standard, limiting the time of year for application, limiting the days of application, and providing perimeter buffers, it is anticipated that odor potential will likely be mitigated or short lived.

Name:	***Ginny Stern - Hydrogeologist, WA State Department of Health-Office of Drinking Water***
Question/Comment:	***Recommend that a conservative sanitary control zone (SCZ) be set around the City of Elma municipal supply well near the application area. The SCZ should be set at the six month time-of-travel distance of 500-600 feet if there are no other mitigating factors about the site and application. The purpose of the zone is to 1) provide controlled access to the wellhead and protect it from physical intrusion (security, protection from flooding or inundation and protect the wellhead from physical damage from activities in the immediate area), and 2) provide an exclusion zone for any activities that may be a source of contamination to the wellhead and ultimately the water source.***

Response: The City of Elma has a municipal supply well located in the NE ¼ of the SE ¼ of Section 33, T18N, R6W. The well is located near the NW corner of field E-1 and is 81.5-feet deep.

To protect the municipal well from potential contamination from the land application of biosolids, mitigation

factors will be in place to buffer the SCZ. These factors will include: 1) only land applying during the driest months of the year to reduce the potential of inundation and overland flow, 2) the SCZ will have a vegetative cover that will reduce the potential for surface runoff and tree and shrubs nearer to the wellhead will provide a physical buffer, 3) the land application site is relatively flat, therefore, reducing the potential of SCZ encroachment, 4) applying biosolids at an agronomic rate will reduce the potential for nitrogen to leach below the crop root-zone, thereby, adding protection to the groundwater, 5) only applying biosolids to the land when the groundwater is a minimum of three feet or greater below ground surface.

A 600-feet radius from the municipal wellhead will be set to establish a SCZ. This will occur adjacent to field E-1 and will eliminate a small portion of the NW corner of the field. Visible markers will be placed to ensure that the horizontal buffer surrounding the well is not compromised.

Name:	***Jeff Nelson – Environmental Health Director, Grays Harbor County Environmental Health Division***
Question/Comment:	***Request that the buffer around the City of Elma municipal supply well be extended to a 400-feet radius. Also, request that other wells have a minimum setback of 200-feet so that direct conduit to the aquifer does not occur.***

Response: As stated above, in the response to the WA State DOH, the radial distance from the municipal supply well will be set at 600-feet. This will make up the sanitary control zone around the City of Elma municipal supply well.

There is an agricultural well located just east of the bridge crossing over Vance Creek. The well is adjacent to the north border of field E-3. A 200-feet radial buffer will be established around this agricultural well as an additional protection of the SCZ. Visible markers will be placed to ensure that the horizontal buffer surrounding the well is not compromised.

Question/Comment:	***Request that setbacks proposed from Vance Creek within the unit be increased to protect County owned recreational use water areas downstream south of the site.***

Response: Federal and state law require a minimum setback from surface waters to be 10 meters (~33 feet). This horizontal buffer is the proposed setback in the Fire Mountain Farms Site Specific Land Application Plan. Because of the proximity to sensitive receptors and to aid in the protection of Vance Creek and direct contact waters south of the site that are fed by Vance Creek; a 50-feet buffer will be established in the final permit coverage. Ecology believes that because of the relative flatness of the site, the established vegetative cover, and the timing of biosolids application, the 50-feet buffer from Vance Creek should be sufficient to deter any potential runoff.

Question/Comment:	***Request that blending different sources of biosolids, as referenced in Section 10 of the Site Specific Land Application Plan, be excluded on the basis that this site is to be used for only the City of Elma WWTP biosolids.***

Response: The fields proposed (E-1, E-2, E-3, E-4, and E-5) that surround the City of Elma WWTP are to be used for the Elma biosolids exclusively. There is no provision for the land application of other sources of biosolids. The language in Section 10.2 of the Site Specific Land Application Plan that refers to blending multiple biosolids sources will be removed.

This concludes Ecology's response to comments received during the public comment period.

For questions regarding this Public Comment Responsiveness Summary, please contact:

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